



*Ministero dello Sviluppo Economico*  
DIREZIONE GENERALE PER LA PIANIFICAZIONE E LA  
GESTIONE DELLO SPETTRO RADIOELETTRICO



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

Bundesamt für Kommunikation BAKOM  
Office fédéral de la communication OFCOM  
Ufficio federale delle comunicazioni UFCOM  
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## **Coordination Agreement between the Administrations of Italy and Switzerland regarding a revised terrestrial frequency TV Plan in the band 470 to 694 MHz**

The undersigned Administrations,

Agree on a specific TV channel distribution in the UHF band from 470 to 694 MHz along the common border, taking into account the topographical decoupling of the mountainous areas.

Background: The decision of the EU Parliament and the Council requires the clearance of the 700 MHz band from broadcasting services in the EU. At the end of 2017 the coordination agreements with the neighbouring countries have to be signed. Latest on 30<sup>th</sup> June of 2018 the Member States of the European Union have to publish their national roadmap which describes how to provide the 700 MHz band for mobile broadband services.

In Switzerland the 700 MHz band is allocated to IMT according to the National Frequency Allocation Table as approved by the Federal Council in 2017.

Considering that without the 700 MHz band 28 TV channels from 21 to 48 will remain, which shall be distributed on the basis of equitable access between both Administrations.

Considering that the mountains between Switzerland and Italy have a strong decoupling effect in some regions, which can be used for efficient frequency planning.

Considering that a coordination zone includes transmitter sites affecting the populated regions of the coverage areas of the neighbouring country.

Considering that the transmitter sites outside the coordination zones have no influence into the populated regions of the coverage areas of the neighbouring country depending on the technical parameters.

### **Coordination zone**

The GE06 buffer zone (Annex 1) will be used. The allotments Wallis, Valais and Valle d'Aosta, Wallis-Piemonte and also Graubuenden-West Bozen are considered as fully compatible. Into the allotment Muenstertal-West Bozen the coordination zone is limited to the coverage areas of the following respective existing transmitters: S Maria i.M. Crappetta and Malles Venosta.

Into the allotment of Ticino-Piemonte Lombardia, Sondrio-Poschiavo and Muenstertal-West Bozen (limited to the coverage areas of the transmitter sites of S. Maria i.M. Crappetta and Malles Venosta) the available 28 TV channels (ch.21 to ch.48) are distributed to Italy and Switzerland, in the coordination zone, as indicated in Annex 2.

The following coordination rules shall be used in order to minimize the administrative burden to apply the ITU-R rules for both Administrations:

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- a.) Existing transmitter sites outside the coordination zone may be notified in the updated GE06 Plan with any channel and without any need of additional agreement, as long as the defined threshold is not exceeded, according to the criteria indicated in the "Calculation method" section.
- b.) Existing transmitter sites inside the coordination zone which fulfil the criteria according to "Calculations method" may be notified in the updated GE06 Plan with any of the channels according to the table of the channel distribution in Annex 2 without any need of additional agreement.

For new TV transmitter sites or modification of the technical parameters outside the coordination zone point a.) has to be applied.

New transmitter sites or modification of the technical parameters inside the coordination zone can be treated according to point b.).

If the operation of a transmitter, although made in accordance with the provisions of this Agreement, results in unacceptable interference to the other Administration (affected Administration), the interfering Administration shall, in cooperation with the affected Administration, immediately take the necessary actions to eliminate the interference.

### Calculations method

The field strength prediction model to be used is ITU-R 1812 or the IRT-2D. The interfering field strength calculation refers to 1% of time. The admissible protection ratio, the antenna discrimination and a threshold of  $49\text{dB}(\mu\text{V/m}) + 20 \cdot \log(f/650)^1$  on test points inside the service areas of any co-channel assignment shall be applied. Areas above 2100 MSL or areas with less than 200 inhabitants are not considered in the evaluation of interfering field strength.

### Transition period

The signatory administrations recognize the necessity of a transition period and will agree on the final date of the implementation within the coordination zone, which shall be before 30<sup>th</sup> June 2022.

Italy will switch off channels 50 to 53 in the coordination zone during the second half of 2020 and will be in line with the agreement before the 30<sup>th</sup> of June 2022, on the basis of the national roadmap that will be approved before the 30<sup>th</sup> of June 2018. In order to achieve the release of the channels 50 to 53 (corresponding to the uplink part of the 2x30 MHz mobile plan) and to comply with this Agreement, Italy expects to use temporary channels during the transition period. The use of temporary channels in the coordination zone will be agreed with Switzerland.

<sup>1</sup> f is the central frequency of each UHF channel expressed in MHz

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Switzerland will clear the 700 MHz band from DTT until the end of 2017. IMT services are expected to start by mid 2019.

### **Review of the Agreement**

With the consent of the other Administration, this Agreement may be modified at the request of one of the signatory Administrations where such a modification becomes necessary in the light of administrative, regulatory or technical developments. Each of the signatory Administrations cannot withdraw unilaterally from this Agreement.

### **Language of the Agreement**

This Agreement exists in two original versions in English. Each Administration has one of the versions.

### **Entry into force**

This Agreement will enter into force on the date of signature.

Done at Rome on 10<sup>th</sup> of October 2017

For the Administration of Italy

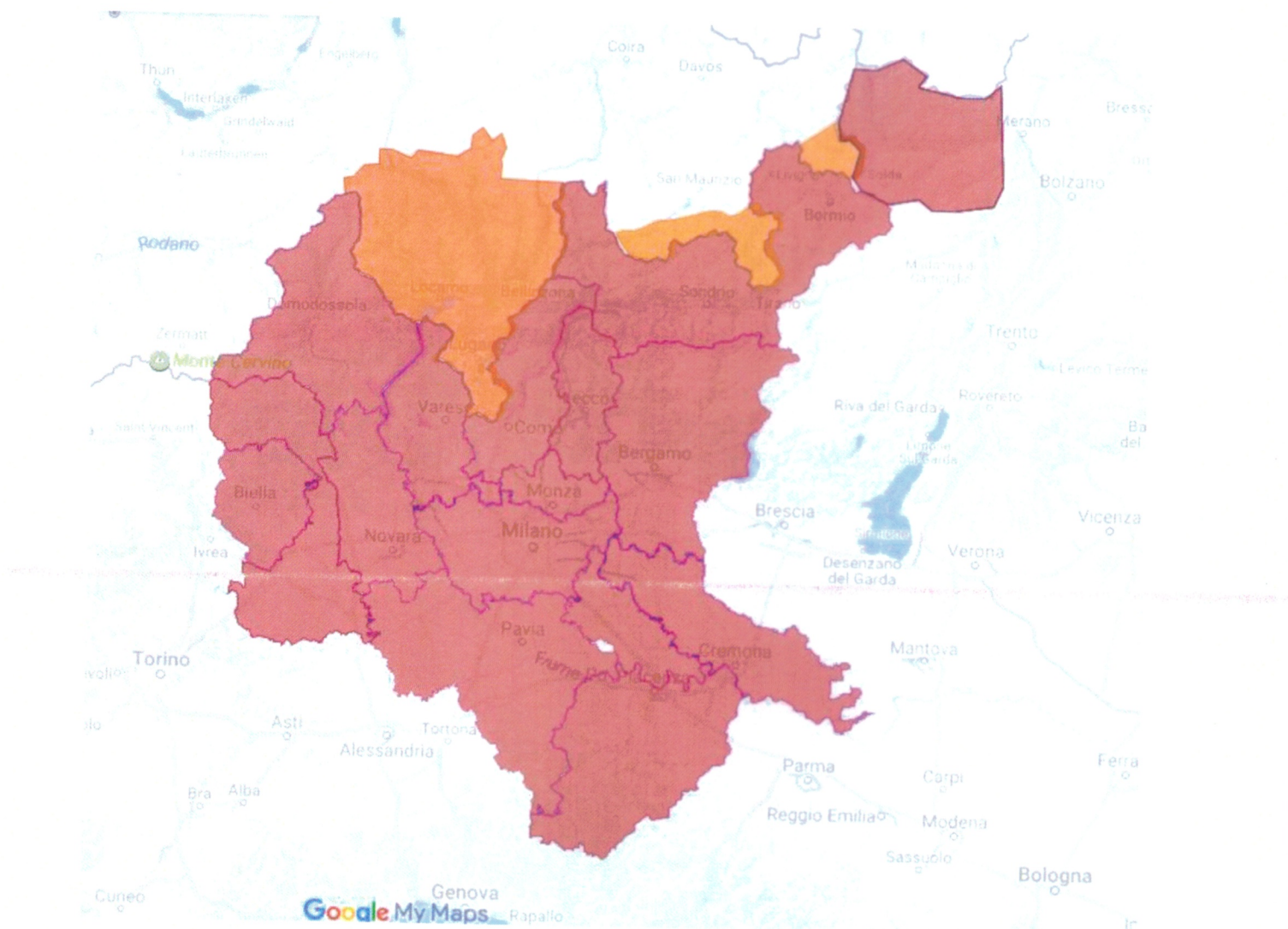
Eva Spina  
MiSE, Spectrum Management and  
Planning Directorate General

For the Administration of  
Switzerland

Konrad Vonlanthen  
OFCOM, Licences and Frequency  
Management Division

## ANNEX 1

### Coordination Zone (\*)



(\*) In case an allotment extends beyond the national border, the protected areas comprise only the national territory of the affected Administration.

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## ANNEX 2

### Channel distribution Italy-Switzerland

Channel		Italy <sup>1</sup>	Switzerland (Ticino)		Italy (Sondrio)	Switzerland (Poschiavo)		Italy <sup>2</sup> (Malles Venosta)	Switzerland <sup>3</sup> (Muenstertal)
21									
22									
23									SUI
24			SUI			SUI			SUI
25									
26									SUI
27			SUI			SUI			SUI
28									SUI
29			SUI			SUI			SUI
30									
31			SUI			SUI			SUI
32			SUI			SUI			SUI
33			SUI			SUI			
34									
35			SUI			SUI			SUI
36									
37			SUI			SUI			SUI
38									
39			SUI			SUI			
40									
41			SUI			SUI			
42			SUI			SUI			SUI
43			SUI			SUI			
44									SUI
45									
46									
47			SUI			SUI			SUI
48									SUI
<b>Total</b>		<b>15</b>	<b>13</b>		<b>15</b>	<b>13</b>		<b>14</b>	<b>14</b>

- (1) Includes the following administrative provinces : Verbania-Cusio-Ossola, Vercelli, Biella, Novara, Varese, Como, Lecco, Milano, Lodi, Monza-Brianza, Pavia, Cremona, Bergamo, Piacenza
- (2) The coordination zone is limited to the coverage areas of the transmitter site of Malles Venosta.
- (3) The coordination zone is limited to the coverage areas of the transmitter site of S Maria i.M. Crappetta.

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*[Handwritten initials]*